

Pioneering for You

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Wilo Australia – Sanitary Circulator Pump Range

Sanitary Circulator Pumps

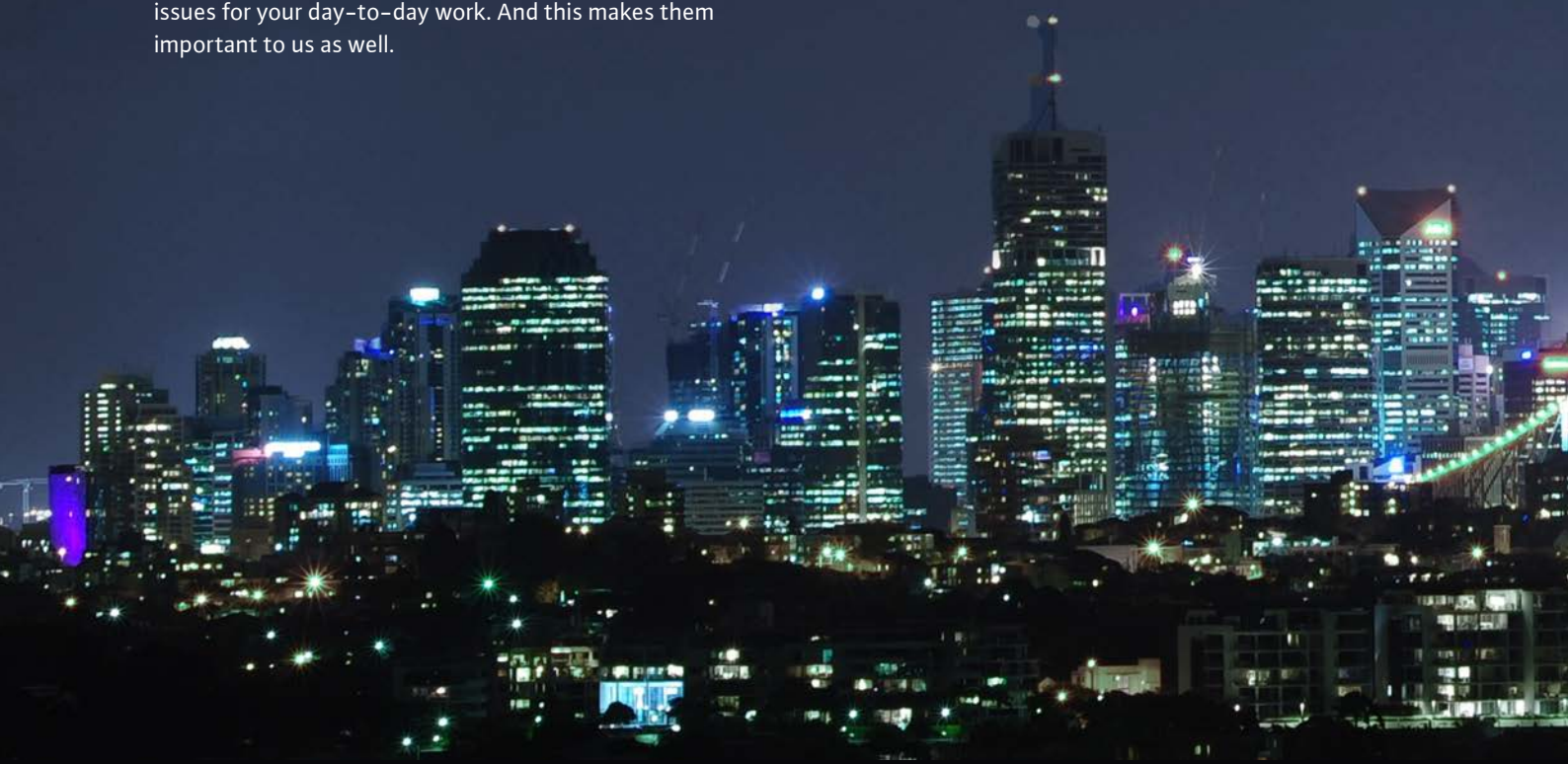
Recirculation pumps for heating and cooling



NOW. HIGH EFFICIENCY SOLUTIONS FOR INDOOR CLIMATES

Wilo is a premium supplier for building services, water management and industrial applications. We make complex technologies user-friendly, simple to use, energy-efficient and high-performance. At the end of the day, the main focus of everything we do is people. We offer them outstanding products, system solutions and services.

Founded in Dortmund in 1872 as a factory for copper and brass goods, Wilo has evolved from being a local specialist to a global player in the course of its long and successful history. We are well-acquainted with the issues that will shape our future and we are developing technologies to address them. Global mega-trends are having a profound and lasting impact on our lives. As we address these trends, we focus on globalisation, urbanisation, climate change, energy scarcity, water shortage as well as technological progress and digitalisation – important issues for your day-to-day work. And this makes them important to us as well.



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EFFICIENT, HIGH-TECHNOLOGY HVAC SOLUTIONS

Pumps & systems for heating, air conditioning,
cooling and domestic hot water



EFFICIENT AIR CONDITIONING

Large buildings that house a variety of applications require highly sophisticated technology and intelligent network-ing. The German Football Museum in Dortmund is a prime example. In addition to the exhibition areas, the building contains a multifunctional arena, several dining areas and a separate floor for events, together extending over 7,700 square metres. The imposing glass front often serves as a canvas for multimedia images and therefore must remain free of condensation. Optimal air conditioning is provided by 21 highly efficient circulators, fully controlled by the building management system. These Wilo pumps ensure resource-efficient operation while maximising potential savings.

















VERSATILE

Our solutions make it possible to supply various types of buildings with a pleasant indoor climate and domestic hot water. From single-family houses to rental, administrative and commercial properties such as hospitals, office spaces or hotels.



KEY

	Residential
	Commercial
	Industrial Processes
	Industrial Circulation
	Booster
	Boiler heating
	Sanitary hot water
	Solar Heating
	Underfloor heating
	Geothermal heating
	Cold water system
	Air Conditioning
	Closed cold circuit
	Grundfos Equivalent replacement models are intended as a guide only. Refer to manufacturer literature for full technical specifications.

GERMAN TECHNOLOGY. LOCAL KNOWLEDGE.

Providing high-efficiency, tailored HVAC
solutions in Australia and New Zealand



Head office
in Brisbane

Sales offices in NSW,
VIC and NZ

National after sales
& service partners





Sanitary Circulator Pumps



Wilo-Star-Z NOVA Sanitary hot water circulation pump



Design type

Glandless circulation pump with screwed connection and blocking-current proof synchronous motor

Application

Domestic hot water circulation systems in industry and building services

Type key

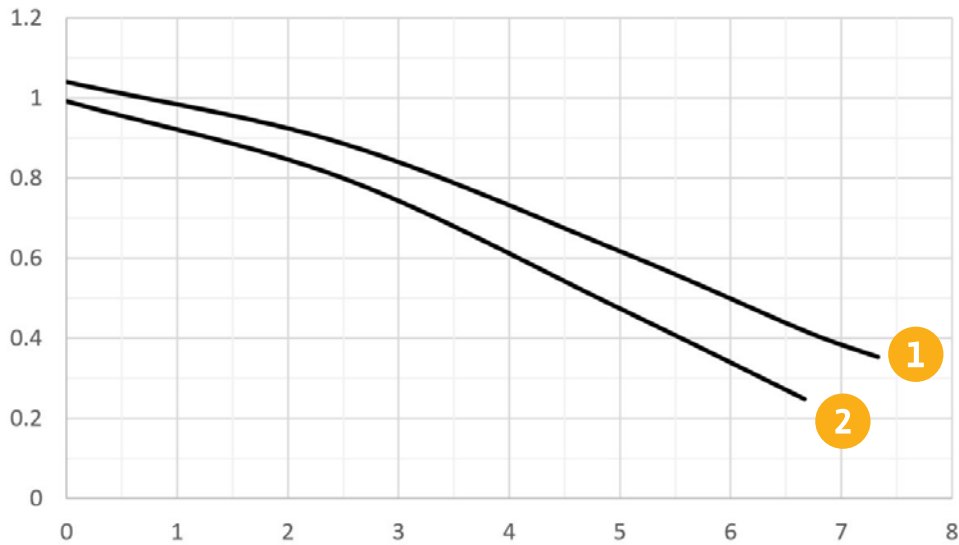
- Example:** Wilo-Star-Z NOVA
- Star-Z** Domestic hot water circulation pump, glandless pump
- NOVA** Type designation
- A** with ball shut-off valve and non-return valve
- B** with ball shut-off valve, non-return valve and
- T** plug-in time switch

Special features/product advantages

- Low power consumption of just 3 to 5 W thanks to synchronous motor
- Extended field of application for hard water: up to 3.57mmol/l (20 °dH)
- Quick, toolless electrical connection thanks to the Wilo-Connector
- Reliable protection from bacteria and corrosion due to the use of high-quality materials for a longer service life
- Flexible service motor: fast replacement of all common pump types

Technical Data	
Permissible area of application	
Permissible temperature range – Heating	+2 °C to +110 °C
Permissible temperature range – Drinking	up to 20 °dH: max. +65 °C, in short-time duty (2 h) up to +70 °C
Mains connection	1~230 V, 50/60 Hz
Protection class	IP 42
Screwed connection or flange connection	Rp ½
Max. operating pressure, standard version	10 bar

Technical Data	
Materials	
Pump housing	Brass (CuZn40Pb2)
Impeller	E Plastic (PPO)
Shaft	Ceramic
Bearing	Carbon, synthetic resin impregnated



Automatic functions

- Time switching function for programming of 3 switch-on or switch-off times (Z 15 TT only)
- Temperature control for maintaining a constant return temperature in the domestic hot water circulation system (Z 15 TT only)
- Thermal disinfection routine (detection and support of thermal disinfection of the domestic hot water tank) (only Z 15 TT)
- Blocking protection (Z 15 TT only)

Signal and display functions

LCD screen for display of pump data and fault codes (Z 15 TT only)

Equipment

- Quick electrical connection with Wilo-Connector
- Integrated ball shut-off valve on the suction side (Star-Z NOVA A, Star-Z-NOVA C only)
- Integrated non-return valve on the pressure side (Star-Z NOVA A, Star-Z-NOVA C only)
- Blocking current-proof motor
- Plug-in time switch (only Star-Z NOVA C)
- 1.8 m connecting cable with shock-proof plug (only Star-Z NOVA C)
- Thermal insulation as standard

Technical Data

Type	Pipe	Overall Length	Mains Connection	Max. Volume Flow	Max. Delivery Head	Thread	Rated Pressure	Grundfos Equivalent*
1 Star-Z NOVA	1/2"	84mm	1~ 230V 50 Hz	7.4 lpm	1 m	G 1	10 bar	
2 Star-Z NOVA T	1/2"	138mm	1~ 230V 50 Hz	6.7 lpm	1 m	G 1	10 bar	COMFORT 15-14



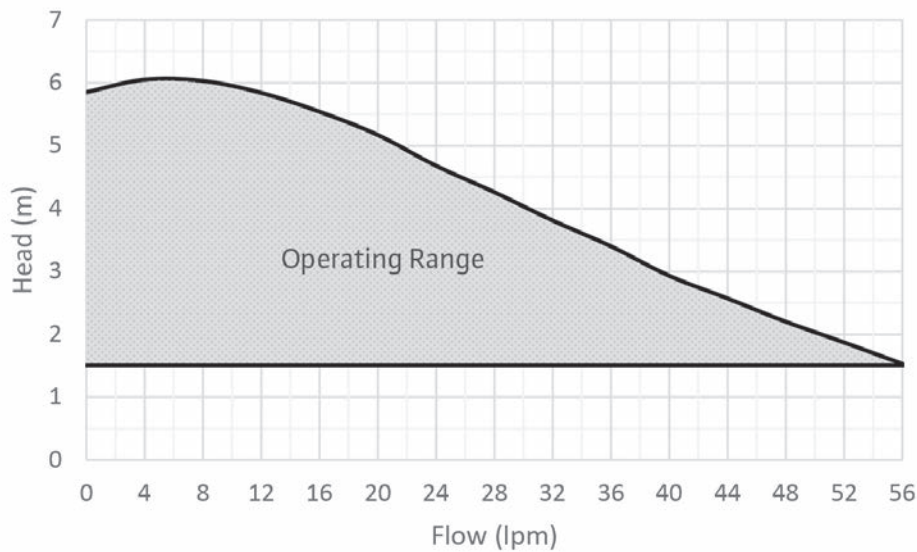
Glandless circulation pump with screwed connection, blocking-current proof EC motor and integrated electronic power control.

Sanitary water circulation systems in the industry and building services.

Example:	Wilo-Stratos PICO-Z 20/1-4
Stratos PICO	High-efficiency pump (screw-end pump), electronically controlled
Z	Sanitary hot water circulation
20/	Nominal connection diameter
1-4	Nominal delivery head range [m]

- Stainless steel design suitable for potable water application
- Constant pressure or temperature control modes available
- Displays current power consumption and cumulative kilowatt hours
- Suitable for retrofitting out asynchronous circulator pumps
- Both models 1~230V 50Hz– fitted with Australian lead and plug for immediate connection

Technical Data	
Materials	
Pump housing	Stainless steel
Impeller	Plastic
Shaft	Stainless steel
Bearing	Carbon, synthetic resin impregnated



Operating modes

- Δp -c for constant differential pressure
- Temperature-controlled mode

Manual functions

- Setting the operating mode
- Setting of pump output (delivery head)
- Setting the minimum temperature
- Setting of the minimum flow
- Reset function for resetting the electricity meter
- Reset function for resetting to factory settings
- "Hold" function (key lock) for disabling the settings

Automatic functions

- Infinitely variable power adjustment according to the operating mode
- Temperature control for maintaining a constant return temperature in the domestic hot water circulation system
- Thermal disinfection routine (detecting and supporting the thermal disinfection of the domestic hot water storage tank)
- Automatic deblocking function

Signal and display functions

- Display of the current power consumption in W
- Display of the cumulative kilowatt hours in kWh
- Display of effective flow in m³/h
- Display of the current temperature in °C
- Indication of fault signals (error codes)

Equipment

- Wrench attachment point on pump body
- Quick electrical connection with Wilo-Connector
- Blocking-current proof motor
- Particle filter
- Thermal insulation as standard

Technical Data

Type	Pipe	Overall Length	Mains Connection	Max. Volume Flow	Max. Delivery Head	Thread	Rated Pressure	Grundfos Equivalent*
Stratos-PICO-Z 20/1-6	3/4"	150 mm	1~230 V, 50 Hz	58 lpm	6 m	G 1¼	10 bar	ALPHA1 20-60
Stratos-PICO-Z 25/1-6	1"	180 mm	1~230 V, 50 Hz	58 lpm	6 m	G 1½	10 bar	ALPHA1 25-60



Wilo-Yonos MAXO Z High EC motor with automatic power adjustment



Design type

Glandless circulator with threaded connection or flange connection, EC motor with automatic power adjustment.

Application

Domestic hot water circulation systems in industry and building services.

Type key

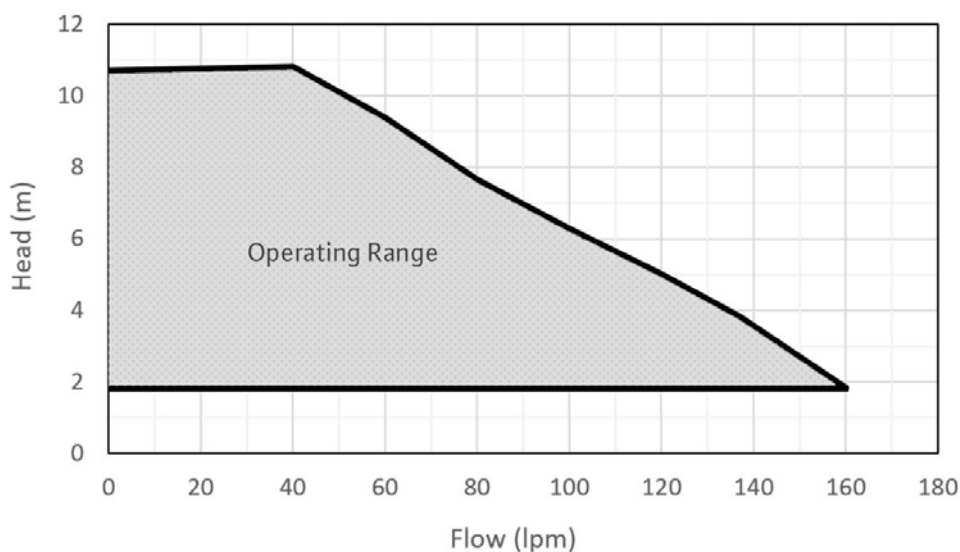
Example: **Wilo-Yonos MAXO-Z 30/0.5-12**
Yonos MAXO High-efficiency pump (screw-end or flange-end pump), electronically controlled
Z Single pump for domestic hot water circulation
30/ Nominal connection diameter
0.5-12 Nominal delivery head range [m]

Special features/product advantages

- High drinking water hygiene ensured through collective fault signal
- Energy-saving due to high-efficiency hydraulics and synchronous motor
- Complete transparency of the delivery head, speed and possible faults thanks to its LED display
- Simple adjustment over three speed stages using the green Knob when replacing an uncontrolled standard pump
- Easier electrical connection thanks to the Wilo-Plug
- Compact design and proven user-friendliness

Technical Data	
Permissible area of application	
Permissible temperature range – Heating	–10 °C to +110 °C
Permissible temperature range – Drinking	up to 3.57 mmol/l (20 °dH): 0 °C to +80 °C
Mains connection	1~230 V, 50 Hz
Protection class	IPX4D
Screwed connection or flange connection	(depending on type) Rp 1 to DN 65
Max. operating pressure, standard version	6/10 bar (special version: 16 bar)

Technical Data	
Materials	
Pump housing	Pump housing made of red brass
Impeller	Plastic
Shaft	Stainless steel
Bearing	Carbon



Operating modes

- Δp -c for constant differential pressure
- Δp -v for variable differential pressure
- n = constant (3 speed stages)

Manual functions

- Setting the operating mode
- Setting of pump output (delivery head)
- Setting the speed stages

Automatic functions

- Infinitely variable power adjustment according to the operating mode
- Deblocking function
- Soft start
- Integrated full motor protection

Signal and display functions

- Collective fault signal (potential-free NC contact)
- Fault signal light
- LED segment display for displaying the delivery head and error codes
- Display of the configured speed stage (C1, C2 or C3)

Equipment

- Quick electrical connection with Wilo plug. For the connection of the mains and SSM lines, with integrated strain relief
- For flange-end pumps: Flange versions
- Standard version for DN 40 to DN 65 pumps: Combination flange PN 6/10 for counter flanges PN 6 and PN 10

Technical Data

Type	Pipe	Overall Length	Mains Connection	Max. Volume Flow	Max. Delivery Head	Thread	Rated Pressure	Grundfos Equivalent*
Yonos MAXO-Z 25/0,5-10	1"	180 mm	1~230 V, 50 Hz	171 lpm	11 m	G 1½	10 bar	MAGNA1 25-80
Yonos MAXO-Z 30/0,5-12	1 ¼"	180 mm	1~230 V, 50 Hz	200 lpm	12 m	G 2	10 bar	MAGNA1 32-100



Wilo-Stratos-Z High-efficiency bronze circulation pump



Design type

Glandless circulation pump with screwed connection, blocking-current proof EC motor and integrated electronic power control.

Application

Sanitary water circulation systems in the industry and building services.

Type key

- Example: **Wilo-Stratos-Z 25/1-8**
Stratos High-efficiency pump (screw-end or flange-end pump), electronically controlled
Z Single pump for domestic hot water circulation
25/ Nominal connection diameter
1-8 Nominal delivery head range [m]

Special features/product advantages

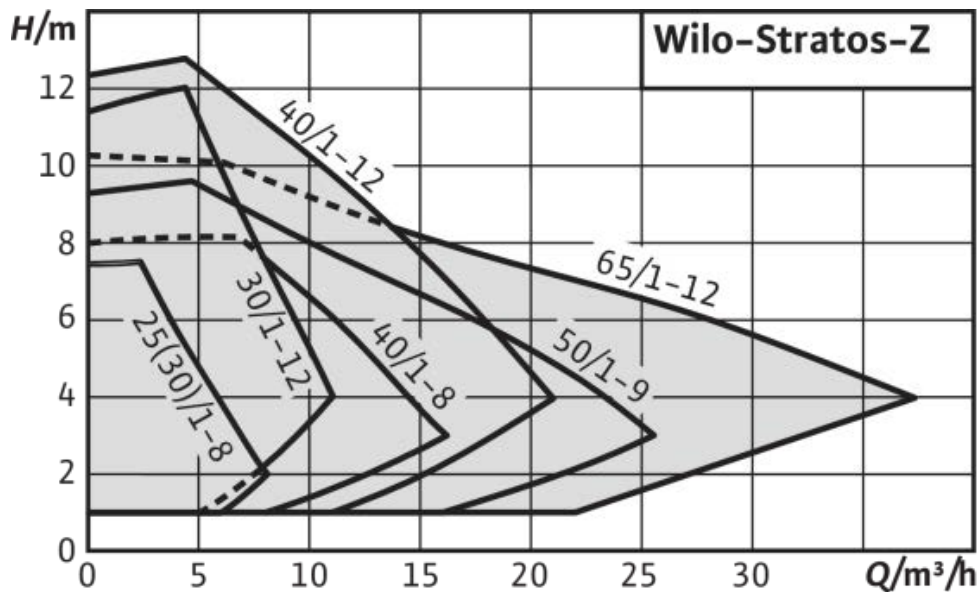
- Energy savings through greater system efficiency with the Q-Limit function (volume flow limiter)
- Constant pressure, variable pressure or temperature control modes available
- Modular concept for connection of all conventional bus systems (e.g. Modbus, BACnet etc)
- Corrosion resistant pump housing
- Full motor protection with integrated trip electronics

Signal and display functions

- Collective fault signal (potential-free NC contact)
- Individual run signal (potential-free NO contact) (possible with Stratos IF-Modules)
- Fault signal light
- LCD display for indication of pump data and fault codes

Technical Data	
Permissible area of application	
Permissible temperature range – Heating	-10 °C to +110 °C
Permissible temperature range – Drinking	-10 °C to +110 °C
Mains connection	1~230 V, 50/60 Hz
Protection class	IP X4D
Screwed connection or flange connection	(depending on type) Rp 1 to DN 65
Max. operating pressure, standard version	standard version: 6/10 bar (special version: 16 bar)

Technical Data	
Materials	
Pump housing	Red brass
Impeller	Plastic
Shaft	Stainless steel
Bearing	Carbon, synthetic resin impregnated



Operating modes

- Manual control mode (n=constant)
- Δp -c for constant differential pressure
- Δp -v for variable differential pressure
- Δp -T for temperature-controlled differential pressure (programmable via IR-Stick, IR-Monitor, Modbus, BACnet, LON or CAN)
- Q limit for limiting the maximum volume flow (setting only via IR-stick)

Manual functions

- Setting the operating mode
- Differential pressure setpoint setting
- Setting automatic setback operation
- Setting the pump ON/OFF
- Setting the speed (manual control mode)

Automatic functions

- Infinitely variable power adjustment according to the operating mode
- Automatic setback operation
- Deblocking function
- Soft start
- Full motor protection with integrated trip electronics

External control functions

- “Overriding Off” control input (possible with Stratos IF-Modules)

- “Overriding Min” control input (possible with Stratos IF-Modules)
- “Analogue In 0 – 10 V” control input (remote speed adjustment) (possible with Stratos IF-Modules)
- “Analogue In 0 – 10 V” control input (remote setpoint adjustment) (possible with Stratos IF-Modules)

Data exchange

- Infrared interface for wireless data exchange with IR-Stick/IR-Monitor
- Modbus RTU serial digital interface for connection to building automation BA via RS485 BUS system (possible with Stratos IF-Modules)
- BACnet serial digital interface MS/TP slave for connection to building automation BA via RS485 BUS system (possible with Stratos IF-Modules)
- CAN serial digital interface for connection to building automation BA via CAN BUS system (possible with Stratos IF-Modules)
- LON serial digital interface for connection to a LONWorks network (possible with Stratos IF-Modules)
- PLR serial digital interface for connection to BA via Wilo interface converter or company-specific coupling modules (possible with Stratos IF-Modules)
- Dual pump management (double pump or 2 x single pumps)
- Main/standby operation (automatic fault-actuated switchover/time-dependent pump cycling): various combinations with Stratos IF-Modules (accessories) possible
- Parallel operation (efficiency-optimised peak load activation and deactivation): various combinations with Stratos IF-Modules (accessories) possible

Technical Data

Type	Pipe	Overall Length	Mains Connection	Max. Volume Flow	Max. Delivery Head	Thread	Rated Pressure	Grundfos Equivalent*
Stratos-Z 25/1-8	1"	180	1-230V 50Hz	123 lpm	8 m	G 1½	16 bar	MAGNA3 25-80N
Stratos-Z 30/1-12	1 1/4"	180	1-230V 50Hz	177 lpm	12 m	G 2	16 bar	MAGNA3 32-100N
Stratos-Z 40/1-12	1 1/4"	250	1-230V 50Hz	376 lpm	12 m	DN 40	16 bar	MAGNA3 40-120N



Wilo-Star-Z Sanitary hot water circulation pump



Design type

Glandless circulator with screwed connection

Application

Sanitary hot water circulation systems in the industry and building services.

Type key

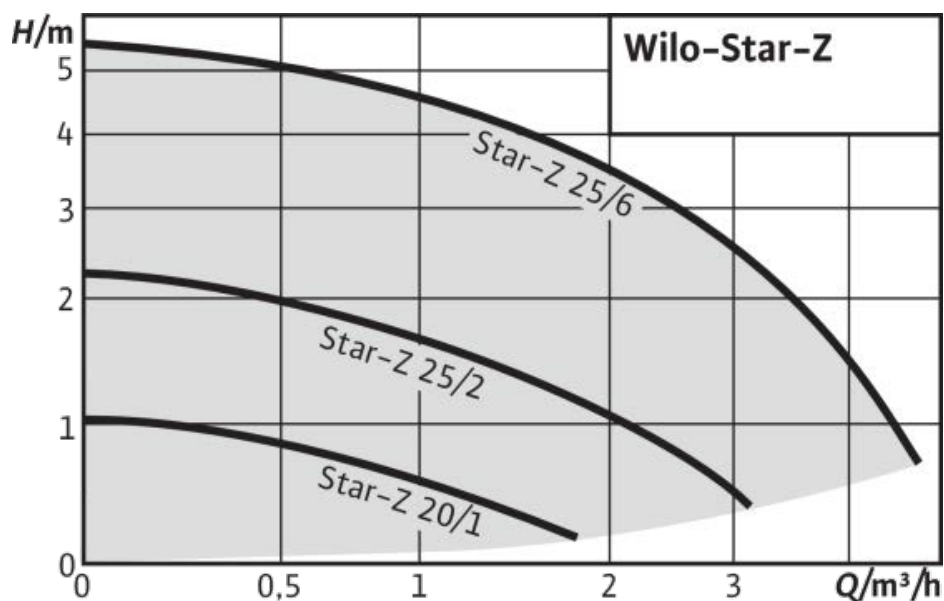
- Example: **Wilo-Star-Z 20/7-3**
Star Standard pump
Z Circulator
20/ Nominal connection diameter
7-3 Nominal delivery head [m]

Special features/product advantages

- Star-Z 20/7-3 features sanitary stainless steel pump housing – AS4020 Certified
- Star Z 25/6-3 supplied with bronze housing
- AC pumps with electrical quick connection
- All plastic parts that come into contact with the fluid fulfil KTW recommendations

Technical Data	
Permissible area of application	
Permissible temperature range – Heating	+2 °C to +110 °C
Permissible temperature range – Drinking	+up to 3.21 mmol/l (18 °dH): max. +65 °C, in short-time duty (2 h) up to +70 °C
Mains connection	1~230 V, 50 Hz, or 3~400 V, 50 Hz for the Star-Z 25/2 DM
Protection class	IP44
Screwed connection or flange connection	Rp ¾ and Rp 1
Max. operating pressure, standard version	10 bar

Technical Data	
Materials	
Pump housing	Bronze, stainless steel
Impeller	Plastic
Shaft	Ceramic
Bearing	Carbon, synthetic resin-impregnated



Operating modes

- Speed stage switching

Manual functions

- Setting of the speed stages (3 speed stages with Star-Z...-3 pumps)

Automatic functions

- Time switching function for programming of 3 switch-on or switch-off times (Z 15 TT only)
- Temperature control for maintaining a constant return temperature in the domestic hot water circulation system (Z 15 TT only)
- Thermal disinfection routine (detection and support

of thermal disinfection of the domestic hot water tank) (only Z 15 TT)

- Blocking protection (Z 15 TT only)

Signal and display functions

- LCD screen for display of pump data and fault codes (Z 15 TT only)

Equipment

- Wrench attachment point on the pump body (Star-Z 25 only)
- Cable inlet possible from both sides (Star-Z 20/..., Star-Z 25/... only)
- Quick connection with spring clips
- Blocking-current proof motor

Technical Data

Type	Pipe	Overall Length	Mains Connection	Max. Volume Flow	Max. Delivery Head	Thread	Rated Pressure	Grundfos Equivalent*
Star-Z 20/7-3	3/4"	150mm	1~ 230V 50 Hz	91 lpm	6 m	G 1 1/4	10 bar	UPS20-60N
Star-Z 25/6-3	1"	180mm	1~ 230V 50 Hz	80 lpm	6 m	G 1 1/2	10 bar	UPS25-60N



Wilo-Top-Z Commercial sanitary hot water circulation pump



Design type

Glandless pump circulator with screwed connection or flange connection. Pre-selectable speed stages for power adjustment

Application

Domestic hot water circulation systems in industry and building services.

Type key

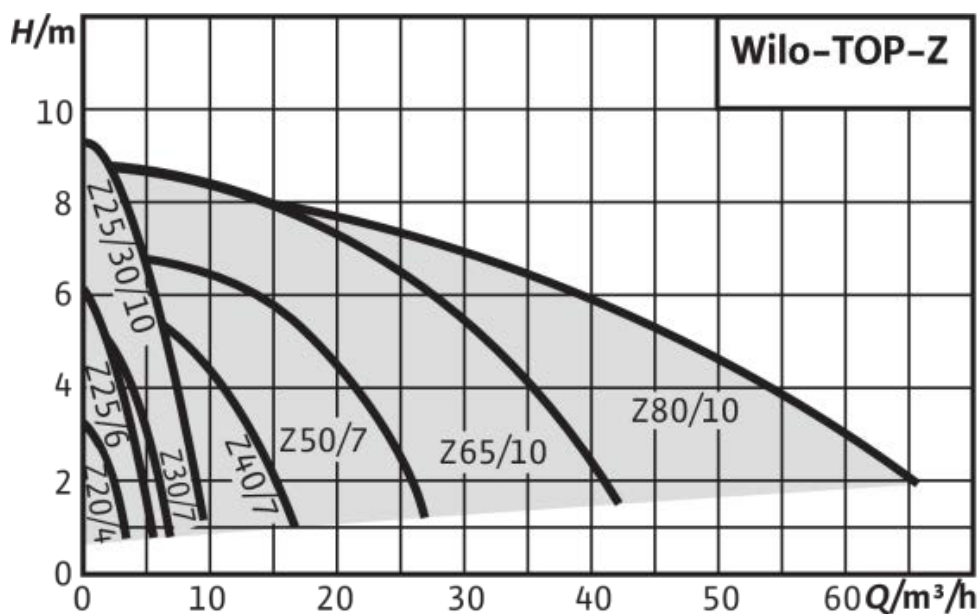
- Example: **Wilo-TOP-Z 40/7**
- TOP** Standard pump (screw-end pump or flange-end pump)
- Z** Single pump for domestic hot water circulation
- 40/** Nominal connection diameter
- 7** Nominal delivery head range [m] at Q = 0 m3/h

Special features/product advantages

- Manual power adjustment through 2-speed selector switch
- Inbuilt motor thermal protection
- Unique self venting design to ensure long-term operation
- All units supplied with bronze housing

Technical Data	
Permissible area of application	
Permissible temperature range – Heating	n/a
Permissible temperature range – Drinking	TOP-Z 25/10 drinking water up to 3.57 mmol/l (20 °dH): max. +80 °C, in short-term operation (2 h) up to +110 °C
Mains connection	1~230 V, 50 Hz
Protection class	IP X4D
Screwed connection or flange connection	(depending on type) Rp ¾ to DN 80
Max. operating pressure, standard version	6/10 bar or 6 bar (special version: 10 bar or 16 bar)

Technical Data	
Materials	
Pump housing	Red brass
Impeller	Plastic
Shaft	Stainless steel/ceramic (depending on type)
Bearing	Carbon, synthetic resin impregnated



Operating modes

- Speed-stage switching

Manual functions

- Setting the speed stages: 3 speed stages

Automatic functions

- Internal protection against unacceptably high winding temperatures (only for pumps with $P_2 < 180$ W, optional for all types with switchgears SK 602N and SK 622N).

Signal and display functions

- Thermal winding contact (WSK, potential-free NC contact) (only for pumps with $P_2 \geq 180$ W)
- Direction of rotation signal lamp (only for 3~ pumps)

Equipment

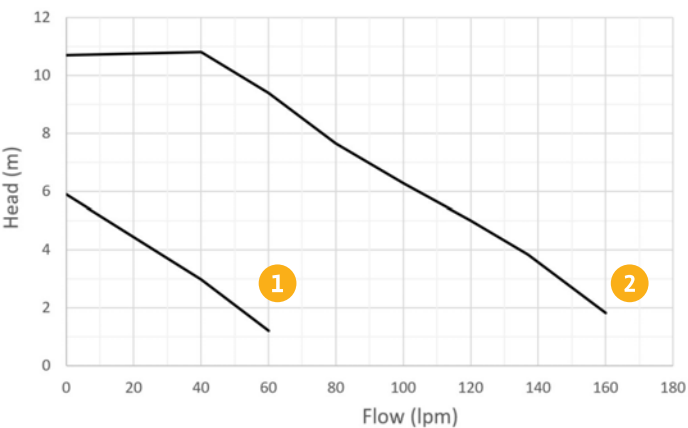
- For flange-end pumps: Flange versions
 - Special version for DN 40 to DN 80 pumps: PN 16 flange (according to EN 1092-2) for PN 16 counter flange,
- Cable inlet possible from both sides (only for 1~pumps and 3~pumps with $P_2 \geq 180$ W)
- Thermal insulation as standard

Technical Data

Type	Pipe	Overall Length	Mains Connection	Max. Volume Flow	Max. Delivery Head	Thread	Rated Pressure	Grundfos Equivalent*
TOP-Z 25/10-EM	1"	180mm	1~ 230V 50 Hz	158	10 m	G 1½	10 bar	UPS25-80N
TOP-Z 30/7-EM	1 1/4"	180mm	1~ 230V 50 Hz	118	5.5 m	G 2	10 bar	UPS32-100N
TOP-Z 30/10-EM	1 1/4"	180mm	1~ 230V 50 Hz	158	10 m	G 2	10 bar	UPS32-100N
TOP-Z 40/7-EM	1 1/4"	250mm	1~ 230V 50 Hz	270	10 m	DN 40	10 bar	



Wilo-Dual Circulator Systems Commercially tailored and pre-packaged



Special features/product advantages

- S2R-3D Panel provides duty/standby operation with time activated changeover
- Volt-free contacts for collective run and collective fault signals for BMS connectivity
- Digital time clock with 7-Day program and 120 hours battery back-up
- Potential for external temperature and pressure sensors to be connected for further control functionality
- Wall mountable galvanised steel baseplate
- Metal weatherproof enclosures available to allow for outdoor installation

Wilo-Dual Circulator Systems						
Type	Pipe Connection	Nominal Diameter	Mains Connection	Gross Weight	Stock Code	Article No.
Manifold System						
1 Dual PICO-Z 20/1-6	3/4"	20	1~ 230V 50 Hz	10.5	L	2996940
2 Dual Yonos MAXO-Z 25/0.5-10	1 1/4"	30	1~ 230V 50 Hz	30.5	L	2996941

Wilo-Dual Circulator Systems Enclosures		
Type	Stock Code	Article No.
Dual PICO-Z 20/1-6-COVER	L	2996646
Dual Yonos MAXO-Z 25/0.5-10-COVER	L	2996647





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